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Flomenblit et al.

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[54] **UROLOGICAL STENT AND DEPLOYMENT DEVICE THEREFOR**

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[51] **Int. Cl.**[6] **A61M 29/00**

[52] **U.S. Cl.** **606/198**; 606/191

[58] **Field of Search** 606/198, 191, 606/194, 195, 108, 192; 604/96

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[57] **ABSTRACT**

A stent adapted for placing in the urethra so as to retain the urethra's diameter above a critical level is provided. The stent comprises:

a spiral band made of a two-way shape memory alloy having two memory states consisting of a first state in which said alloy is soft and substantially deformable and a second state in which the alloy has super elastic properties and is substantially non-deformable, the alloy changes from the fast state to the second state at a first transition temperature being above physiological body temperature and changes from the second to the first state at a second transition temperature being below physiological body temperature; in the second state consecutive windings of the band are adjacent one another so that they form together essentially a continuous cylindrical tube of a diameter above said critical level; in the first state the band forms a coiled structure having a maximal external diameter such so as to allow deployment of stent within the urethra.

6 Claims, 4 Drawing Sheets